STATUS OF THE CLAIMS

1. (Currently amended) A method for obtaining umbilical cord matrix stem cells from an umbilical cord matrix comprising: (a) fractionating ~~the~~ an umbilical cord matrix source of cells, the source substantially free of cord blood, into a fraction ~~enriched~~ with umbilical cord matrix stem cells, and a fraction depleted of umbilical cord matrix stem cells, ~~and~~ (b) exposing the fraction ~~enriched~~ with umbilical cord matrix stem cells to conditions suitable for cell proliferation and (c) passaging said fraction with umbilical cord matrix stem cells to remove non-adherent cells and select a fraction enriched for umbilical cord matrix stem cells, wherein said umbilical cord matrix stem cells are negative for CD34 and CD45, positive for telomerase activity, can be expanded in vitro, and maintained in culture through repeated passages.

2. (Cancelled).

3. (Currently amended) A cultured isolate comprising umbilical cord matrix stem cells isolated from an umbilical cord matrix source of stem cells, other than cord blood, the isolate comprising primitive immortal umbilical cord matrix stem cells, wherein said umbilical cord matrix stem cells in said cultured isolate are negative for CD34 and CD45, positive for telomerase activity, can be expanded in vitro, and maintained in culture through repeated passages.

4-11. (canceled).

12. (Currently amended) A method of generating a bank of umbilical cord matrix stem cells from an umbilical cord matrix, the method comprising: (a) fractionating the umbilical cord matrix into a fraction ~~enriched~~ with umbilical cord matrix stem cells and a fraction depleted of umbilical cord matrix stem cells; ~~and~~ (b) culturing the fraction ~~enriched~~ with umbilical cord matrix stem cells in a culture medium containing one or more growth factors, wherein ~~the~~ an umbilical cord matrix stem cells undergo mitotic expansion; and (c) passaging the fraction with umbilical cord matrix to remove non-

adherent cells and select a fraction enriched with umbilical cord matrix stem cells, wherein said umbilical cord matrix stem cells are negative for CD34 and CD45, positive for telomerase activity, can be expanded in vitro, and maintained in culture through repeated passages.

13. (original) The method of claim 12 further comprising tissue typing, banking and expanding the umbilical cord matrix stem cells needed.

14. (withdrawn) The method of claim 12 further comprising differentiating the umbilical cord matrix stem cells in vitro.

16. (Currently amended) The method of claim 12 further comprising passaging the umbilical cord matrix stem cells for at least 10 times and the umbilical cord matrix stem cells remaining stable.

17. (Currently amended) The method of claim 12 wherein the ~~animal cells~~ umbilical cord matrix stem cells are from any amniotic species.

18. (Currently amended) The method of claim 12 wherein the ~~animal cells~~ umbilical cord matrix stem cells are human cells.

19. (Currently amended) The method of claim 12 wherein the ~~animal cells~~ umbilical cord matrix stem cells are porcine or bovine cells.

20. (Currently amended) The method of claim 12 wherein the ~~animal cells~~ umbilical cord matrix stem cells are equine or canine cells.

21. (Currently amended) The method of claim 12 wherein the ~~animal cells~~ umbilical cord matrix stem cells are rodent cells.

22-31. (cancel1ed)

32. (withdrawn) A method of transplanting the cell of claim 1, the method comprising: transplanting that cell into an animal that can benefit from a stem cell transplant.

33. (withdrawn) A method of treating an animal for alleviation of a disease symptom, the method comprising obtaining a UCMS cell isolated from a source of such cells derived from umbilical cord other than cord blood and transplanting that UCMS cell into an animal that can benefit from a stem cell transplant.

34. (currently amended) A purified preparation of human UCMS cells comprising: ~~(a)~~ ~~UCMS~~ cells ~~derived~~ isolated from Wharton's Jelly, wherein said cells are negative for CD34 and CD45, positive for telomerase activity, ~~capable of proliferation~~ proliferate in an in vitro culture for over one year~~; (b),~~ maintain~~ing~~ a karyotype in which all the chromosomes ~~characteristic~~ of the human are present and not noticeably altered through prolonged culture,~~;~~ and ~~(c)~~ maintain~~ing~~ the potential to differentiate into derivatives of endoderm, mesoderm or ectoderm tissues throughout the culture.

35. (currently amended) The stem cells of claim 34 wherein the stem cells are ~~capable of being~~ typed, banked or expanded.

36-40. (canceled)

41. (Currently amended) An umbilical cord matrix stem cell culture comprising a stem cell population and a feeder cell population, the culture comprising: (a) ~~amniote~~ umbilical cord matrix stem cells negative for CD34 and CD45, positive for telomerase activity, ~~capable of proliferation~~ proliferate in an in vitro culture for over one year, maintain a karyotype in which all the chromosomes of the human are present and not noticeably altered through prolonged culture, and maintain the potential to differentiate into derivatives of endoderm, mesoderm or ectoderm tissues throughout the culture; and

(b) a feeder cell population comprising amniote UCMS cells, said feeder cells incapable of beginning or conducting a mitotic process, but capable of providing growth factors~~; (c) maintaining a karyotype in which all the chromosomes mammalian characteristics are present and not noticeably altered through prolonged culture; and (d) maintaining the potential to differentiate into derivatives of endoderm, mesoderm and ectoderm tissues throughout the culture~~.

42. (currently amended) The stem cell culture of claim 41 wherein the umbilical cord matrix stem cells are ~~capable of being~~ typed, banked or expanded.

43. (currently amended) The stem cell culture of claim 42 wherein the umbilical cord matrix stem cells and the feeder cells are of human origin.

44-46. (cancelled)